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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/488,286	01/20/2000	Tetsujiro Kondo	450100-02293	4230

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EXAMINER

VO, TUNG T

ART UNIT PAPER NUMBER

2613

DATE MAILED: 04/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/488,286

Applicant(s)

KONDO ET AL.

Examiner

Tung T. Vo

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6,8,10,13,15,17,20,22,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,8,10,13,15,17,20,22,24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/01/03 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 10, 17, and 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, 10, 17, and 24-25 recites the limitation "said signal image". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US 6,507,366).

Re claims 24 and 25, Lee discloses an information processing apparatus (figs. 1-3A-3C) comprising a motion detector (340 of 3A) for detecting motion vectors for plurality of predetermined blocks within each frame of an image signal to be displayed on a display device (the BMA divides the image signal of a display unit screen into magnitude blocks of a predetermined unit, see col. 5, lines 12-29; a generator (5 of fig. 1) for generating a motion control signal corresponding to each frame said image signal by calculating motion vectors (MOTION VECTORS of fig. 1); a rocking device (tilting or panning or moving) for rocking an object (1 and 2 of fig. 1) with the motion control signal (5 of fig. 1), wherein the movement of the rocking object is controlled by the motion control signal (5 and 7 of fig. 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al. (US 5,364,270) in view of Loughheed et al. (US 5,686,690).

Re claims 24 and 25, Aoyama discloses an information processing (fig. 1) for processing information that is read from the information read means (2 of fig. 1), the information read means reads out video and motion information from a memory (M of fig. 2), the motion information has been predetermined when the video data has been captured; an identification information (S1 of fig. 2) specifies the motion information based upon the selected means (1 of fig. 1) then sends the motion information to the motion means (4 of fig. 2) to generate the a motion control in accordance with the motion information (col. 4, lines 16-34), the motion information is calculated or estimated in advance and sent to a servo mechanism (18 of fig. 2) to drive a chair (16 of fig. 2) in various directions such as upward, downward, acceleration, and motions or tilts back, forth, right, left and inherently in vertical, horizontal, a magnification rotation (col. 5, lines 11-26), and a display device (3 of fig. 1) to display an image signal (col. 4, lines 22-24), and the control signal to contain a plurality of components (col. 5, lines 11-26) to impart a rocking, swinging, or vibrating motion to an object.

Aoyama further suggests the storage medium for storing the video information and the motion information associated with the video information before displaying on the displayed (col. 1, lines 58-62; col. 2, lines 1-3; e.g. the storage medium stores the video image before displaying so the storage medium is delaying the video information (video frame)); wherein the predetermined motion unit perform the motion information based upon the stored video information (col. 2, lines 3-6). Aoyama further teaches a display device (3 of fig. 1) to display video information (video image signal) (col. 4, lines 22-24), and the control signal to contain a plurality of components (col. 5, lines 11-26).

Moreover, Aoyama suggests the predetermined motion information that has been calculated or estimated in advance and then converted into oil pressure control information to drive a servomechanism (col. 5, lines 14-18), where the motions are measured or calculated in the images (col. 5, lines 14-15), synchronism with motion in the images. Although Aoyama does not particularly teach a detector for detecting one motion vector for each block composed a plurality of pixels at predetermined position within a frame as specified in claims 1, 3, and 9.

However, Loughheed discloses a change detection (110 of fig. 9) to detect one motion vector for each block composed a plurality of pixels at predetermined position within a frame (col. 15, lines 14-44), where a summation (112 of fig. 1) computes the difference in intensity between pixels in the current frame and the preceding frame to produce one motion.

Taking the teachings of Loughheed and Aoyama as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the change detector (110 of fig. 9) of Loughheed with the information read means (2 of fig. 1) of Aoyama to detect the motion related-signal in accordance with an image signal. Doing so would allow the processing apparatus to accurately

detect motion information that would be sent to the servomechanism to move in various motions so that the user/player would enjoy the image in a real time.

Allowable Subject Matter

8. Claim 1, 4, 6, 8, 10, 13, 15, 17, 20, and 22 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is an examiner's statement of reasons for allowance: The combination of Aoyama et al. and Loughheed does not particularly disclose the motion control signal being generated to represent both actual stimulus and simulated stimulus to an object; the simulated stimulus including at least components corresponding to centrifugal force, inertial force, and yaw in combination with others as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TUNG T. VO
PATENT EXAMINER

T.Vo

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Examiner
Art Unit 2613